LISTING OF THE CLAIMS

1. (Previously presented) A composite filter comprising an electronic circuit including at least two cascading filters of different orders and having passband ripples with respect to signal gain of the respective filter at frequencies in a passband of the respective filter and nearly equal in magnitude and out of phase with respect to each other in order to minimize a passband ripple in the composite filter, wherein the orders of the two cascading filters differ in value by exactly one.

2. (Previously presented) A composite filter as claimed in claim 1, characterized in that the magnitude of the passband ripples in the at least two cascading filters are equal.

3. (Previously presented) A composite filter as claimed in claim 1, characterized in that at least one of the at least two cascading filters includes a digital filter.

4. (Previously presented) A composite filter as claimed in claim 1, characterized in that at least one of the at least two cascading filters includes an analog filter.

5. (Previously presented) A composite filter as claimed in claim 1, characterized in that at least one characteristic of the at least two cascading filters is selected to minimize the passband ripple in the composite filter.

6. (Previously presented) A composite filter as claimed in claim 5, characterized in that the at least one characteristic includes the order of the at least two cascading filters.

7. (Cancelled)

8. (Cancelled)

9. (Previously presented) A composite filter as claimed in claim 5, characterized in that the at least one characteristic includes a bandwidth of the at least two cascading filters.

10. (Previously presented) A composite filter as claimed in claim 5, characterized in that the at least one characteristic includes a stopband attenuation of the at least two cascading filters.

11. (Previously presented) A method for passband ripple cancellation in cascading filters to minimize a passband ripple in a composite filter comprising the steps of: providing, in an electronic circuit, at least two filters of different orders and having passband ripples with respect to signal gain of the respective filter at frequencies in a passband of the respective filter and nearly equal in magnitude and out of phase with respect to each other in order to minimize the passband ripple in the composite filter, wherein the orders of the two cascading filters differ in value by exactly one.

12. (Previously Presented) A method as claimed in claim 11, characterized in that the magnitudes of the passband ripples in the at least two cascading filters are equal.

13. (Previously presented) A method as claimed in claim 11, characterized in that at least one of the at least two cascading filters includes a digital filter

14. (Previously presented) A method as claimed in claim 11, characterized in that at least one of the at least two cascading filters includes an analog filter.

15. (Previously Presented) A method as claimed in claim 11, characterized in that at least one filter characteristic for the at least two cascading filters is selected to minimize the passband ripple in the composite filter.

16. (Previously Presented) A method as claimed in claim 15, characterized in that the at least one filter characteristic includes a bandwidth for the at least two cascading filters.

17. (Previously Presented) A method as claimed in claim 15, characterized in that the at least one filter characteristic includes a stopband attenuation for the at least two cascading filters.

18. (Previously Presented) A method as claimed in claim 15, characterized in that the at least one filter characteristic includes an order for the at least two cascading filters.

19. (Cancelled)

20. (Cancelled)

21. (Previously presented) The composite filter of claim 1, wherein one filter of the two cascading filters is a third order filter and another filter of the two cascading filters is a fourth order filter.

22. (Previously presented) The composite filter of claim 1, wherein at least one of the cascading filters is an infinite impulse response filter.

23. (Previously presented) The composite filter of claim 1, wherein at least one of the cascading filters is a finite impulse response filter.

24. (Previously presented) The method of claim 11, wherein the step of providing in an electronic circuit at least two filters is implemented such that the combined frequency response of the at least two filters has a peak ripple less than about 0.10 dB at around 7.8 MHz.

25. (Previously presented) The method of claim 11, further including the step of performing a low-pass to bandpass transformation on each of the at least two filters.